IN THE CLAIMS

Please amend the claims as follows:

1. (original) A method for monitoring the quality of a manufacturing process for making detector panels comprising a plurality of pixels in a two-dimensional array, said method comprising:

in each detector panel, manufacturing a set of baseline pixels and a set of test pixels wherein each test pixel comprises an electrical component having a geometric dimension varied by an amount sufficient to introduce a measurable variation in a test to measure parameters of pixels dependent upon the varied dimension;

performing the test on the set of baseline pixels and the set of varied pixels;

analyzing the results of the test; and

adjusting parameters of the manufacturing process in accordance with said analysis.

2. (original) A method in accordance with Claim 1 wherein performing the test to measure a parameter dependent upon the varied dimension comprises illuminating the set of baseline pixels and the set of varied pixels simultaneously, and the parameter dependent upon the varied dimension is lag.

3. (original) A method in accordance with Claim 1 wherein each pixel includes a photodiode, and the varied geometric dimension in the test pixels is a dimension of a layer of the photodiode.

4. (original) A method in accordance with Claim 3 wherein manufacturing a set of baseline pixels and a set of test pixels comprises manufacturing a first subset of test pixels having a first geometric dimension varied, and manufacturing a second subset of test pixels having a second, different geometric dimension varied.

5. (original) A method in accordance with Claim 3 wherein each baseline pixel is adjacent a test pixel and vice versa.

6. (original) A method in accordance with Claim 5 wherein manufacturing a set of baseline pixels and a set of test pixels comprises manufacturing a first subset of test pixels having a first geometric dimension varied, and a second subset of test pixels having a second, different geometric dimension varied.

7. (original) A method in accordance with Claim 5 wherein rows or columns alternate between rows or columns of baseline pixels and rows or columns of test pixels.

8. (original) A method in accordance with Claim 7 wherein the rows or columns of test pixels alternate between rows or columns of test pixels having the first geometric dimension varied, and rows or columns of test pixels having the second geometric dimension varied.

9. (original) A method in accordance with Claim 8 wherein the first geometric dimension variation is the same amount for all pixels having the first geometric dimension varied, and the second geometric dimension variation is the same for all pixels having the second geometric dimension varied.

10. (original) A method in accordance with Claim 1 wherein performing the test on the set of baseline pixels and the set of varied pixels comprises performing the test on a single detector panel; and analyzing the results of the test comprises analyzing morphology of a difference image.

11. (original) A method in accordance with Claim 1 wherein performing the test on a set of baseline pixels and the set of varied pixels comprises performing the

test on different detector panels, and analyzing the results of the test comprises analyzing a change in average sensitivity between different detector panels.

12. (original) A method for monitoring the quality of a manufacturing process for making detector panels comprising a plurality of pixels in a two-dimensional array, and wherein each pixel includes a field effect transistor, said method comprising:

in each detector panel, manufacturing a set of baseline pixels and a set of test pixels wherein each test pixel has an electrical component having a geometric dimension varied by an amount sufficient to introduce a measurable variation in a test to measure parameters of pixels dependent upon the varied dimension, wherein manufacturing a set of test pixels comprises manufacturing a set of test pixels with dimension of the field effect transistor varied;

performing the test on the set of baseline pixels and the set of varied pixels;

analyzing the results of the test; and

adjusting parameters of the manufacturing process in accordance with said analysis.

13. (original) A method in accordance with Claim 12 wherein the varied dimension is FET channel length.

14. A method in accordance with Claim 13 wherein performing the test on the set of baseline pixels and the set of varied pixels comprises performing the test on a single detector panel; and analyzing the results of the test comprises analyzing morphology of a difference image.

15. (original) A method in accordance with Claim 13 wherein performing the test on a set of baseline pixels and the set of varied pixels comprises performing the test on different detector panels, and analyzing the results of the test comprises analyzing a change in average sensitivity between different detector panels.

16. (original) A method for monitoring the quality of a manufacturing process for making detector panels comprising a plurality of pixels in a two-dimensional array, wherein each pixel includes a field effect transistor and a photodiode, said method comprising:

in each detector panel, manufacturing a set of baseline pixels and a set of test pixels wherein each test pixel has an electrical component having a geometric dimension varied by an amount sufficient to introduce a measurable variation in a test to measure parameters of pixels dependent upon the varied dimension, wherein manufacturing a set of test pixels comprises manufacturing a first subset of test pixels having a geometric dimension of the field effect transistor varied, and manufacturing a second subset of test pixels having a geometric dimension of the photodiode varied;

performing the test on the set of baseline pixels and the set of varied pixels;

analyzing the results of the test; and

adjusting parameters of the manufacturing process in accordance with said analysis.

17. (original) A method in accordance with Claim 16 wherein manufacturing a second subset of test pixels having a geometric dimension varies comprises manufacturing a first portion of the second subset of test pixels with a first geometric dimension varied and a second portion of the second subset of test pixels with a second geometric dimension varied.

18. (original) A method in accordance with Claim 17 wherein the variation of the geometric dimension of the field effect transistor is the same for all pixels having the geometric dimension of the field effect transistor varied, the first geometric dimension variation is the same amount for all pixels having the first geometric dimension of the photodiode varied, and the second geometric dimension variation is the same for all pixels having the second geometric dimension of the photodiode varied.

19. (original) A method in accordance with Claim 18 wherein performing the test to measure a parameter dependent upon the varied dimension comprises illuminating the set of baseline pixels and the set of varied pixels simultaneously, and the parameter dependent upon the varied dimension is lag.

20. (original) A method in accordance with Claim 16 wherein every other row or column is a row or column of baseline pixels, and of the remaining rows or columns, every third row or column is a row or column of the first subset of test pixels, every third row or column is a row or column of the first portion of the second subset of test pixels, and every third row or column is a row or column of the second portion of the second subset of test pixels.

21. (original) A method in accordance with Claim 16 wherein performing the test on the set of baseline pixels and the set of varied pixels comprises performing the test on a single detector panel; and analyzing the results of the test comprises analyzing morphology of a difference image.

22. (original) A method in accordance with Claim 16 wherein performing the test on a set of baseline pixels and the set of varied pixels comprises performing the test on different detector panels, and analyzing the results of the test comprises analyzing a change in average sensitivity between different detector panels.

23 – 27 (canceled).